

**Bindi dermatitis to
'chandan' bindi**

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Bindi (meaning dot in Sanskrit) is a mark worn by most Indian women on their forehead for religious and social purposes.

Traditionally it was worn by only Hindu women to signify their marital status. Nowadays, it is a huge fashion accessory, being worn in different sizes, shapes, designs and colours. The variety includes sequined designs, motifs dusted with gold and silver powder, studded with beads, or even surrounded by glittering gems. Stick-on and liquid ranges are both equally in demand.

We report a case of bindi dermatitis with 'chandan' (sandalwood) bindi. To our knowledge this is the first report of contact allergic dermatitis to 'chandan' (sandalwood) bindi.

Key words: allergic contact dermatitis; bindi; chandan (sandalwood); Hindu

Case Report

A 69-year-old Gujarati woman presented with a 4-month history of a black circular patch on the centre of her forehead. She had been applying 'chandan' bindi at the same spot for approximately 18 months. This has traditionally been worn by widows as coloured bindis were not allowed. The bindi was bought in India in a paste form which she would wet with water and apply on the centre of her forehead each day. During her married life she used to wear 'kumkum' bindi which had caused no such symptoms. She denied ever using any adhesive type of bindis. She initially noticed itching and red spots on her skin where the bindi was applied, which became darker over the months.

On examination, a circumscribed pigmented macular lesion with some scaling was noticed on the centre of her forehead (Figs 1 and 2).

She was patch tested to the bindi to which she was positive (1+ at day 4). Patch test to European standard, preservatives and face and eye battery were negative. In particular she was negative to nickel sulfate, para tertiary butyl phenol formaldehyde resin (PTBP) and paraphenylenediamine.

She stopped using the bindi and initially applied 1% hydrocortisone cream and simple emollients. Gradually, over 12 months, the darkened circle faded on her forehead.

Discussion

Materials implicated in contact dermatitis include kumkum or vermil-



Fig. 1. Circumscribed pigmented macular lesion with some scaling.



Fig. 2. Close-up of macular lesion.

ion powder containing starch or chalk powder coloured with azodyes. Sindhoor, the red coloured powder contains red sulfide or mercury (1). Bindi containing nickel causing contact allergy also has been reported (2). Adhesive bindis containing para tertiary butylphenol (PTBP) have shown to cause contact depigmentation (3).

Chandan bindi is made with sandalwood paste, blended with musk. Other constituents can include saffron and camphor. In Hindu temples, sandal wood paste offered to the gods is later given along with 'prasadam' (consecrated temple food) to people who visit the temple. During marriage ceremonies, sandal wood paste is kept at the entrance in order to welcome the invited guests. It is also worn by men, in particular by temple priests. This paste is said to give a cooling and calming effect to the head.

As the bindi was imported and then discarded by the patient, its constitu-

ents were not readily available. We however patch tested 20 other volunteers to the similar 'chandan' (sandalwood) bindi to exclude an irritant effect of the bindi. All 20 volunteers tested negative. Sandalwood oil and musk ambrette are known to cause photoallergic reactions and perhaps patients using these products should undergo photo patch testing as well.

To our knowledge this is the first report of contact allergic dermatitis to 'chandan' (sandalwood) bindi.

References

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